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SECRET

Last week the press announced that THE ADMINISTRATION HAD GROUNDED THE NUCLEAR AIRPLANE PROJECT. Secretary McElroy had previously asked the Joint Chiefs to review this project and to advise him REGARDING MILITARY REQUIREMENTS IN THIS AREA, EXCLUSIVE OF ANY PSYCHOLOGICAL ADVANTAGE OF HAVING A NUCLEAR PLANE FLYING BEFORE THE SOVIETS DO. The political pressure is for a program that will get a flying platform as soon as possible. AEC sponsors this idea. Dr. York, DOD Director of Research and Engineering, presented his estimate of the present situation. There are two systems under development for the manned aircraft installation. The Direct Air Cycle (several types of reactors) requires split shielding, and even then, will have such residual radioactive leakage that one flyover a cow pasture at 5-10,000 feet will radioactively contaminate milk above the safe limit. PLANES USING THE PLANT (NICHROME V) THAT MUST BE USED IN ANY PLANE OF THE NEAR FUTURE, COULD NEVER PROVIDE MUCH MORE THAN .56 MACH AT 10,000 FEET. Indirect Air Cycle power

plants depend upon reactor heat application to a medium which heats the air that passes through the turbine. This requires only a unit shield and it can be solidly closed. THESE TYPES are capable of greater growth and, according to present techniques, COULD PROVIDE A PLANE OF THE SAME WEIGHT WITH A MACH .86 SPEED AND RAISE THE CEILING FROM 10,000 TO 25,000 FEET. A smaller plane could be developed in the supersonic range. Major General Keirn, USAF countered Dr. York's presentation the next day. He remarked that they had stressed the requirements for an aircraft nuclear propulsion system in 1951. In 1953, Mr. Wilson terminated the first flight project, a conventionally powered B36 carrying an atomic reactor. Atomic engines of the NICHROME V type (direct air cycle) have been run for 200 hours. He estimated engine in-flight tests in 1961 if the airframe were available. Tests flights from ARCO on chemical fuel to the test area and return would require a plane weighing 585,000 pounds, of which 180,000 would be fuel. Such configuration and dual propulsion units would be necessary to reduce population and area hazard. This has been borne out by the safety studies which have cost more than 2 million dollars. Two such aircraft called the Convair 54 are desired by the Air Force. This program would cost $940.5 million during the 1960-64 period, with the plane

flying early in 1964. General Keirn did not agree with Dr. York that the present atomic powered engine had no military potential, since the substitution of chemical fuel for the NI-5 fuel could produce a .9 Mach airplane. He believed that it might not be put into the category of a desirable or essential element of a weapon system at the present time; but insisted that military potential was there. The Chiefs agreed that the present project WAS NOT SUCH as to convince them that THERE IS A MILITARY REQUIREMENT FOR SUCH A WEAPON SYSTEM, but THERE IS A MILITARY REQUIREMENT FOR CONTINUING THE DEVELOPMENT IN THIS FIELD. This is a fine point that apparently was reflected in the Administration's decision to place greater emphasis on development of more advanced types of reactors and engines.

THE SPLIT OVER THE COMMAND OF THE POLARIS SYSTEM IS STILL UNRESOLVED. Secretary McElroy recently had the Chiefs in to discuss the problem and this was fortunate. It looked as if the Secretary already was "sold" on the idea of HAVING ALL RETALIATORY STRIKING FORCES UNDER ONE COMMANDER.

Further discussion indicated that Mr. McElroy was not fully aware of the implications of this concept. For example, he did not interpret it as requiring a concentration of all targeting under one commander even though this was specifically included in the Air Force proposal. He stated that this was not under dispute. He did not consider that naval operations would be a problem. His idea was that the operations of the SSB(N)s would be left to the Navy to handle, and that this was merely a matter of two commanders getting together to coordinate their forces.

We gave a briefing to Mr. McElroy which included the full story. It pointed out the responsibilities and capabilities of the present organization structure relative to target assignment and coordination, and showed the implications of giving such vast responsibility to a single commander. It further illustrated that the key to survival in

SECRET

the nuclear age is dispersal, not consolidation.

The Secretary has not announced a decision. Probably our briefing was successful in making him think a little more about all of these problems. At a subsequent press conference he stated that the final decision would not be made for some time.

The important thing for us is to clear away the smoke screen that has served to confuse the targeting picture. Of all of our national weapon systems, in existence or programmed, the submarine launched POLARIS will be the easiest to target for. More importantly, the organizational MACHINERY FOR TARGET COORDINATION AND ASSIGNMENT already IS IN PLACE AND FUNCTIONING UNDER THE JCS. With a little oiling it can do this job well.

The big problem will concern the control and coordination of the launching platform--the SSB(N) submarine.

NAVY POSITION

THE PRESENT UNIFIED COMMAND STRUCTURE IS ENTIRELY ADEQUATE AND NEEDS NO BASIC CHANGES TO HANDLE POLARIS SYSTEM. THE UNIFIED COMMANDERS, THROUGH THEIR NAVAL COMPONENT COMMANDERS, HAVE THE NECESSARY EXPERIENCE, ORGANIZATION AND COMMUNICATIONS IN BEING.

SECRET

IMPORTANT POINTS

1. ATOMIC TARGET PLANNING AND OPERATIONAL COORDINATION ARE ALREADY PROVIDED FOR within the existing Unified Command structure. They are the responsibility of the JCS incident to the strategic direction of the Armed Services. This results in a world-wide plan controlled by JCS and participated in by all Services at all echelons assisted by joint agencies such as DASA and a Joint Targeting arrangement. In this scheme the JCS promulgate atomic warfare guidance and allocate weapons to Unified Commanders. The Unified Commanders prepare target lists, determine level of damage and program weapons and delivery systems, and the JCS review and approve final plans.

2. THE SSB(N) SYSTEM WILL INTRODUCE NO NEW TARGET COORDINATION PROBLEMS. It is adaptable to the simplest targeting procedures. With its high security and invulnerability, it can be pre-planned for deliberate response against a stable target system. The need for a few improvements in procedures should not be interpreted as a requirement for vast changes which would weaken the authority of the JCS.

3. CONTROL AND COORDINATION PROPERLY BELONG AT THE JCS LEVEL because these factors determine force levels, involve our Allies, affect capabilities of all Unified Commanders, and are elements

of our national policy.

4. THE UNIFIED COMMANDER CONTROLLING ALL OTHER FRIENDLY NAVAL FORCES IN THE LAUNCHING AREA MUST ALSO CONTROL THE POLARIS SYSTEM in order to insure effective coordination, safety, and flexibility in the use of all naval forces. Unlike manned aircraft the coordination of the ballistic missile, once launched, does not involve such factors as ECM, communications, IFF, SAR, TOT. The operational coordination of the POLARIS system involves continuous coordination of the launching platform rather than the missile. This includes coordination with other surface ships, continuous movement within firing area, defense against enemy submarines and intermixing with friendly submarines. These SSB(N) submarines have passive, concurrent, collateral capabilities that can provide assistance to our ASW efforts. Performance of collateral missions must in no way degrade their capability to carry out their overriding deterrent mission.

5. ALL UNITED STATES STRIKING POWER SHOULD NOT BE PUT UNDER A SINGLE COMMAND with a single line of control IF INEVITABLE RETALIATION IS TO BE INSURED. The strength of our deterrence lies in the variety and world-wide deployment of our striking forces. Strike back capability must be dispersed to more than one Unified Commander just as certainly as the individual striking units must be dispersed.

SECRET

The Air Force in separate recommendations on the '61 budget has recommended that 9 POLARIS submarines are adequate and that no more should be laid down. If SAC were to get control of POLARIS, their recommendations might be similar. We know, of course, that POLARIS in subs or surface ships is cheaper, less vulnerable, more reliable, etc., than any other retaliatory system.

It may be a long while before a decision is reached. Our arguments will stand up under close scrutiny and we must all be familiar with them.